

**Remarks**

The above Amendments and these Remarks are in reply to the Office Action mailed November 10, 2010.

**I. Summary of Examiner's Rejections**

Prior to the Office Action mailed November 10, 2010, Claims 1-8, 15-21, 28, 29 and 31-34 were pending in the Application. In the Office Action, the drawings were objected to under 37 CFR 1.83(a). Claims 1, 6-8, 15, 18-21, 29 and 32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner et al. (U.S. Patent No. 6,892,382 hereinafter Hapner), in view of Susarla (U.S. Publication No. 2004/0015936 hereinafter Susarla), and further in view of Kiernan et al. (U.S. Patent No. 5,701,137 hereinafter Kiernan). Claims 2, 4-5, 16-17, 28 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla and Kiernan, in view of Kemper et al. (U.S. Patent No. 6,804,682 hereinafter Kemper). Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla, Kiernan and Kemper, in view of Chan et al. (U.S. Publication No. 2003/0028364 hereinafter Chan). Claim 31 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla, Kiernan, in view of Birkler (U.S. Patent No. 6,466,951 hereinafter Birkler). Claim 34 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla and Kiernan, in view of Bunnell (U.S. Patent No. 6,119,122 hereinafter Bunnell).

**II. Summary of Applicant's Amendment**

The present Reply amends Claims 1, 15, 21, 33, cancel Claim 31, and add new Claim 35, leaving for the Examiner's present consideration Claims 1-8, 15-21, 28, 29 and 32-35.

**III. Objections to the Drawings**

In the Office Action mailed November 10, 2010, the drawings were objected to under 37 CFR 1.83(a) as failing to show every feature of the invention specified in the claims, namely the builder component capable of X, Y, Z ...".

Applicant respectfully traverses this objection and submits that, in the present instance, the "builder component" specified in the claims is illustrated as a labeled representation in Figure 3. Applicant respectfully further submits that the features provided by the builder component, which are specified as "capable of X, Y, Z", are not structural details that are essential for a proper understanding of the disclosed invention be shown in the drawing.

**IV. Claim Rejections under 35 U.S.C. § 103(a)**

Claims 1, 6-8, 15, 18-21, 29 and 32 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, in view of Susarla, and further in view of Kiernan. Claims 2, 4-5, 16-17, 28 and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla and Kiernan, in view of Kemper. Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla, Kiernan and Kemper, in view of Chan. Claim 31 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla, Kiernan, in view of Birkler. Claim 34 was rejected under 35 U.S.C. 103(a) as being unpatentable over Hapner, Susarla and Kiernan, in view of Bunnell.

**Claim 1**

Claim 1 has been amended to recite the following:

1. (Currently Amended) A system for supporting application deployment, comprising:
  - a plurality of deployment descriptor files that are adapted to describe deployment and configuration information of a plurality of applications deployed on a web server, wherein each application of the plurality of applications is associated with at least one deployment descriptor file of the plurality of deployment descriptor files and each application is deployed in a project directory in the web server; and
    - a builder component capable of
      - creating a first tree data structure based on the plurality of deployment descriptor files, wherein the first tree data structure represents a state of resources associated with the plurality of applications that are described in the plurality of deployment descriptor files, wherein the first tree data structure includes a first sub-tree that represents the state of resources that corresponds to a first application of the plurality of applications;
      - creating a second tree data structure, independent of the plurality of deployment descriptor files, based on a current state of source files existing in a first project directory associated with the first application, wherein the second tree data structure represents the current state of resources associated with the first application;
      - comparing the first sub-tree that corresponds to the first application in the first tree data structure with the second tree data structure; and
      - refreshing the first tree data structure based on the second tree data structure if the first sub-tree in the master tree data structure is different from the second tree data structure.

Hapner discloses that deployment descriptors are used to deploy modules in an enterprise environment (Abstract). Hapner further discloses that deployment tool is generally

arranged to read deployment descriptors and to deploy module according to the specifications and requirements of each module type (Column 5, Lines 13-16).

However, as stated in the pending Office Action, Hapner does not teach creating a tree data structure based on a current state of source files existing in a first project directory of the plurality of directories associated with the first application to represent the current state of resources associated with the first application.

Susarla discloses application level separation of the class loader stacks (Figure 5, Paragraph [0104]). Susarla further discloses that the class loaders are arranged in layers. For each descendant loader of a loader which is changed, relevant properties are copied from the old loader to the new one (Paragraph [0125-0137]).

Applicant respectfully submits that, unlike the class loader stacks in Susarla, the second tree data structure, as embodied in Claim 1, is created independent of the first tree data structure, which represents a state of resources associated with the plurality of applications that are described in the plurality of deployment descriptor file. Applicant respectfully further submits that there is no indication in Susarla that the second tree data structure is created based on a current state of source files existing in a first project directory of the plurality of directories associated with the first application.

Kiernan discloses a process of creating a child tree based on a parent tree (Column 10, Lines 47-48). Furthermore, once a child tree is created, it maintains a master-client relationship with the master. All actions are centered on the master. When a user edits a tree control, the tree control reports the change to the master (Column 10, Lines 49-60).

However, the child tree in Kiernan is also created based on the parent tree, whereas the second tree data structure, as embodied in Claim 1, is created independent of the first tree data structure.

In view of the above comments, Applicant respectfully submits that Claim 1, as amended, is neither anticipated by, nor obvious in view of the cited references, and reconsideration thereof is respectfully requested.

### **Claims 15 and 21**

The comments provided above with regard to Claim 1 are herein incorporated by reference. Claims 15 and 21 have been amended in a manner similar to Claim 1. Applicant respectfully submits that Claims 15 and 21, as amended, are likewise neither anticipated by, nor

rendered obvious in view of the cited references, when considered alone or in combination with other claims. Reconsideration thereof is respectfully requested.

**Claims 2-8, 16-20, 28-29 and 31-34**

Claims 2-8, 16-20, 28-29 and 31-34 depend from and include all of the features of Claim 1, 2, 4, 15 and 16. Claims 2-8, 16-20, 28-29 and 31-34 are not addressed in detail herein. Applicant respectfully submits that these claims are allowable at least as depending from an allowable independent claim, and further in view of the amendments to the independent claims, and the comments provided above. Reconsideration thereof is respectfully requested.

**V. Additional Amendments**

Claim 35 has been newly added by the present Reply. Subject to the approval of the Examiner, Applicant respectfully requests that new Claim 35 be included in the Application and considered therewith.

**VI. Conclusion**

In view of the above amendments and remarks, it is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and reconsideration thereof is respectfully requested. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

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